

Appl. No. 09/505,830
Amdt. dated March 11, 2004
Reply to Office action of December 31, 2003

Amendments to the Specification:

Amend the paragraph beginning at page 5, line 6 as follows:

a' --Non-Volatile Memory circuit 20 is connected to a ~~KVG-68~~
KGV-68 encryption device 24 which allows Non-Volatile Memory
circuit 20 to load a crypto key with its corresponding check word
into the encryption device 24. The encryption device is
connected to a telemeter transmitter 26 which transmits encrypted
telemetry data from an encryption device 24 to a ground
station.--

Amend the paragraph beginning at page 7, line 1 as follows:

2^d --At this time it should be noted that the software of
Appendix A is adapted for processing two KGV-68 although only one
is illustrated in FIG. 1. In a security upgrade configuration
the software operates in a manner which allows two KGV-68
encryption units to be loaded with a crypto key and its
corresponding check word. It should be noted that while FIG. 1
only shows one ~~KVG-68~~ KGV-68, the non-volatile memory comprising
the present invention may be easily modified to accommodate to
~~KVG-68~~ KGV-68 encryption units.

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Amend the paragraph beginning at page 7, line 22 as follows:

--The XMTR_DISABLE output from microprocessor 32 is set high during initialization to disable transmitter 26.

a3 The ENCR_SENSE_IN output from microprocessor 32 is set low during initialization indicating that the ~~KVG-68~~ KGV-68 encryption device 24 is not being loaded. The ENCR_FCLK and ENCR_FDATA outputs from microprocessor 32 are set high during initialization. The clock signal provided by microcontroller 32 at the ENCR_FCLK output from microcontroller 32 has an active falling edge necessitating that the signal be set high during initialization of microcontroller 32. Setting the ENCR_FDATA output from microprocessor 32 high results in "0" at the ENCR_FDATA output of microprocessor 32.--

Amend the ABSTRACT beginning at page 23, line 1 as follows:

--A Non-Volatile Memory circuit ~~which functions~~ operating as an interface between a key loader and an encryption device.

~~Included in the~~ The Non-Volatile Memory circuit ~~is~~ includes a microcontroller which ~~has an EEPROM adapted for storage of~~ stores a crypto key and ~~its corresponding~~ checkword and ~~also~~ a backup crypto key and checkword. ~~Connected to the microcontroller is a~~
~~4 MHz clock signal generator which supplies the master clock~~

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~~signal to the microcontroller. A pair of light emitting diodes~~
~~are also connected to the microcontroller to indicate the status~~
~~of a load of the crypto key within the microcontroller as well~~
~~as the status of an erase of the crypto key from the~~
~~microcontroller.~~ The microcontroller is ~~also~~ connected to the
telemeter transmitter for ~~the~~ a missile. ~~This allows~~ allowing
the microcontroller to turn off the transmitter during a key load
which prevents transmission of the crypto key and ~~its~~
~~corresponding~~ checkword. When the microcontroller completes a
load of the crypto key ~~from its internal EEPROM~~ to the encryption
device and upon a launch of the missile, ~~the~~ software within the
microcontroller erases the crypto key and ~~its corresponding~~
checkword from ~~its~~ an internal EEPROM. This prevents an enemy
force from retrieving the crypto key and its corresponding
checkword from the missile after launch.